Amendments to the Claims:

This listing of claims will replace all previous version, and listings, of claims in this application.

Listing of Claims:

1. (Currently amended) A compound according to claim 27 which is:
3-Amino-*N*-(3-nitrophenyl)-6-[4-(pyrrolidin-1-ylsulfonyl)phenyl]pyrazine-2-carboxamide;
~~3-Amino-6-[4-(pyrrolidin-1-ylsulfonyl)phenyl]-*N*-1*H*-tetrazol-5-ylpyrazine-2-carboxamide;~~
N-[3-(Acetylamino)phenyl]-3-amino-6-[4-[(4-methyl-1-piperazinyl)sulfonyl]phenyl]-2-pyrazinecarboxamide[[, or]];
3-Amino-*N*-[3-(aminosulfonyl)phenyl]-6-[4-[(4-methyl-1-piperazinyl)sulfonyl]phenyl]-2-pyrazinecarboxamide;
~~as a free base or a pharmaceutically acceptable salt thereof;~~
~~3-Amino-6-[4-({[(1*R*)-2-methoxy-1-methylethyl]amino}sulfonyl)phenyl]-*N*-pyridin-3-ylpyrazine-2-carboxamide hydrochloride;~~
~~3-Amino-6-[4-({[(1*S*)-2-methoxy-1-methylethyl]amino}sulfonyl)phenyl]-*N*-pyridin-3-ylpyrazine-2-carboxamide hydrochloride;~~
~~3-Amino-6-(4-{[(2-ethoxyethyl)amino]sulfonyl}phenyl)-*N*-pyridin-3-ylpyrazine-2-carboxamide hydrochloride;~~
3-Amino-*N*-(2-methoxyphenyl)-6-{4-[(4-methylpiperazin-1-yl)sulfonyl]phenyl}pyrazine-2-carboxamide hydrochloride;
3-Amino-*N*-(4-methoxyphenyl)-6-{4-[(4-methylpiperazin-1-yl)sulfonyl]phenyl}pyrazine-2-carboxamide hydrochloride;
3-Amino-*N*-[2-(aminocarbonyl)phenyl]-6-{4-[(4-methylpiperazin-1-yl)sulfonyl]phenyl}pyrazine-2-carboxamide hydrochloride;
3-Amino-*N*-[3-(aminocarbonyl)phenyl]-6-{4-[(4-methylpiperazin-1-yl)sulfonyl]phenyl}pyrazine-2-carboxamide hydrochloride;
3-Amino-*N*-(3-cyanophenyl)-6-{4-[(4-methylpiperazin-1-yl)sulfonyl]phenyl}pyrazine-2-carboxamide hydrochloride;

3-Amino-*N*-(2-bromophenyl)-6-{4-[(4-methylpiperazin-1-yl)sulfonyl]phenyl}pyrazine-2-carboxamide hydrochloride;

3-Amino-*N*-(3-bromophenyl)-6-{4-[(4-methylpiperazin-1-yl)sulfonyl]phenyl}pyrazine-2-carboxamide hydrochloride;

~~3-Amino-6-{4-[(4-methylpiperazin-1-yl)sulfonyl]phenyl}-*N*-1*H*-pyrazol-3-ylpyrazine-2-carboxamide hydrochloride;~~

~~3-Amino-*N*-[4-(aminocarbonyl)-1*H*-pyrazol-3-yl]-6-{4-[(4-methylpiperazin-1-yl)sulfonyl]phenyl}pyrazine-2-carboxamide hydrochloride;~~

~~3-Amino-*N*-1*H*-imidazol-2-yl-6-{4-[(4-methylpiperazin-1-yl)sulfonyl]phenyl}pyrazine-2-carboxamide hydrochloride;~~

~~3-amino-6-[3-fluoro-4-[2-(4-morpholinyl)ethoxy]phenyl]-*N*-3-pyridinyl-2-pyrazinecarboxamide hydrochloride;~~

~~3-Amino-6-[4-[[(1-ethyl-3-piperidinyl)amino]sulfonyl]phenyl]-*N*-3-pyridinyl-2-pyrazinecarboxamide hydrochloride;~~

~~3-Amino-6-[4-[[bis(2-methoxyethyl)amino]sulfonyl]phenyl]-*N*-3-pyridinyl-2-pyrazinecarboxamide hydrochloride;~~

~~3-Amino-6-[4-[[(3-methylbutyl)amino]sulfonyl]phenyl]-*N*-3-pyridinyl-2-pyrazinecarboxamide hydrochloride;~~

~~3-Amino-6-[4-[[[(1*S*)-2-methoxy-1-methylethyl]amino]carbonyl]phenyl]-*N*-3-pyridinyl-2-pyrazinecarboxamide hydrochloride;~~

~~3-Amino-*N*-3-pyridinyl-6-[4-[[[2-(1-pyrrolidinyl)ethyl]amino]carbonyl]phenyl]-2-pyrazinecarboxamide hydrochloride;~~

3-Amino-*N*-(3-methoxyphenyl)-6-[4-[(4-methyl-1-piperazinyl)sulfonyl]phenyl]-2-pyrazinecarboxamide hydrochloride;

N-(3-Acetylphenyl)-3-amino-6-[4-[(4-methyl-1-piperazinyl)sulfonyl]phenyl]-2-pyrazinecarboxamide hydrochloride, or

3-Amino-6-[4-[(4-methyl-1-piperazinyl)sulfonyl]phenyl]-*N*-[3-(trifluoromethyl)phenyl]-2-pyrazinecarboxamide hydrochloride;

or [[as]] a free base <u>of any said hydrochloride</u> or ~~an alternative~~ <u>a</u> pharmaceutically acceptable salt thereof.

2. (Currently amended) A pharmaceutical formulation comprising as active ingredient a therapeutically effective amount of ~~the compound according to claims 1 or 27 in association with pharmaceutically acceptable carriers or diluents~~ a compound according to claim 1 or 27 in association with a pharmaceutically acceptable carrier or diluent.

Claims 3 to 10. (Cancelled)

11. (Withdrawn) A method of prevention and/or treatment of conditions associated with glycogen synthase kinase-3, comprising administering to a mammal, including man in need of such prevention and/or treatment, a therapeutically effective amount of a compound defined in claims 1 or 27.

12. (Withdrawn) A method of prevention and/or treatment of dementia, Alzheimer's Disease, Parkinson's Disease, Frontotemporal dementia Parkinson's Type, Parkinson dementia complex of Guam, HIV dementia, diseases with associated neurofibrillar tangle pathologies and dementia pugilistica, comprising administering to a mammal, including man in need of such prevention and/or treatment, a therapeutically effective amount of a compound defined in claims 1 or 27.

13. (Withdrawn) The method according to claim 12, wherein the prevention and/or treatment is Alzheimer's Disease.

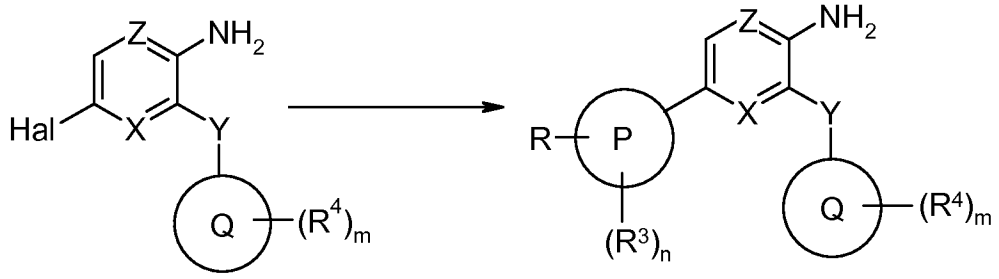
14. (Withdrawn) A method of prevention and/or treatment of amyotrophic lateral sclerosis, corticobasal degeneration, Down syndrome, Huntington's Disease, postencephalitic parkinsonism, progressive supranuclear palsy, Pick's Disease, Niemann-Pick's Disease, stroke, head trauma and other chronic neurodegenerative diseases, Bipolar Disease, affective disorders, depression, schizophrenia, cognitive disorders, hair loss, contraceptive medication, Type I and Type II diabetes, diabetic neuropathy and diabetes related disorders comprising administering to a mammal, including man in need of such prevention and/or treatment, a therapeutically effective amount of a compound defined in claims 1 or 27.

15. (Withdrawn) The method according to claim 14, wherein the prevention and/or treatment is Type I and Type II diabetes, diabetic neuropathy and diabetes related disorders.

16. (Withdrawn) A method of prevention and/or treatment of predemented states, Mild Cognitive Impairment, Age-Associated Memory Impairment, Age-Related Cognitive Decline, Cognitive Impairement No Dementia, mild cognitive decline, mild neurocognitive decline, Late-Life Forgetfulness, memory impairment and cognitive impairment, vascular dementia, dementia with Lewy bodies, Frontotemporal dementia and androgenetic alopecia, comprising administering to a mammal, including man in need of such prevention and/or treatment, a therapeutically effective amount of a compound defined in claims 1 or 27.

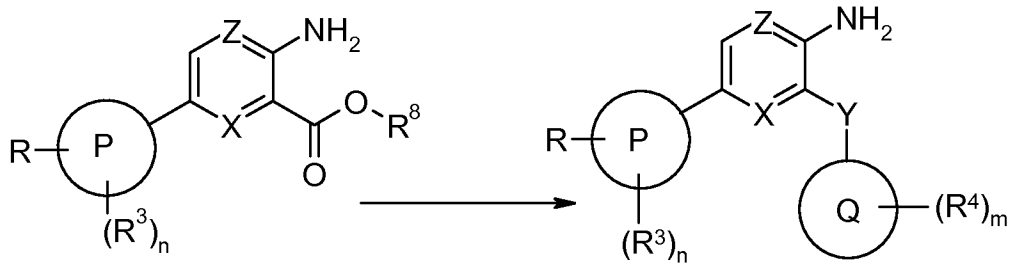
17. (Withdrawn) A process for the preparation of a compound defined in claim 1 which falls under the general formula **I**, wherein Y, X, Z, P, Q, R, R^1, R^2, R^3, R^4, R^5, R^6, R^7, A, m and n are defined as in formula **I**, comprising of:

A) de-halogen coupling of a compound of formula **IV** where Hal is halogen with a appropriate aryl species to give a compound of formula **I**:



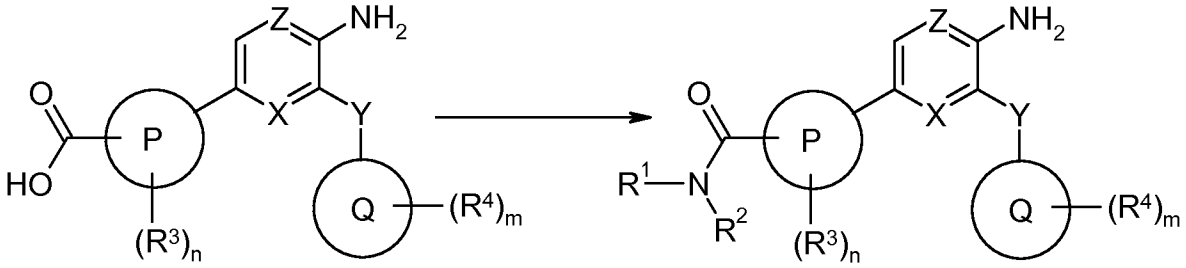
(**IV**) (**I**)

B) amidation of a compound of formula **VI** wherein R^8 is C_{1-6}alkyl or hydrogen with theappropriate amine:



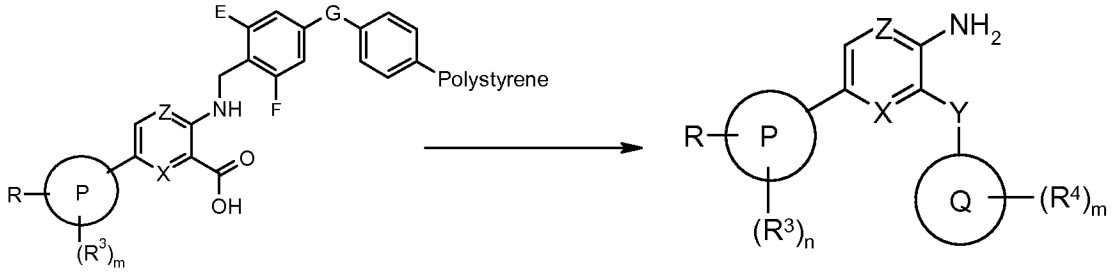
(VI) **(I)**

C) amidation of a compound of formula **XX**, with the appropriate amine to give a compound of formula **I**:



(XX) **(I)**

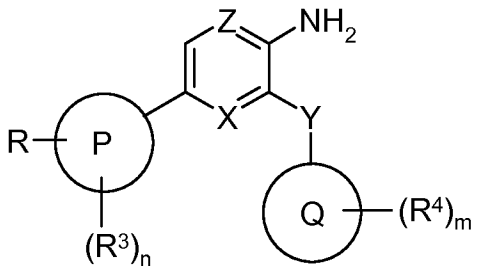
D) amidation of a compound of formula **XIX** with the appropriate amine and treating with coupling reagents:



(XIX) **(I).**

Claims 18 to 26. (Cancelled)

27. (Currently amended) A compound of the generic formula **I**:



(**I**)

wherein:

Z is N;

Y is $CONR^5$;

X is N;

P is phenyl;

Q is phenyl;

R is selected from $C_{0-6}alkyl(SO_2)NR^1R^2$, $C_{0-6}alkylCONR^1R^2$ and $OC_{1-6}alkylNR^1R^2$;

R^1 and R^2 are independently selected from hydrogen, $C_{1-6}alkyl$, $C_{1-6}alkylNR^6R^7$, $C_{1-6}alkylOR^6$ and ~~a 5 or 6 membered heterocyclic ring containing one or more heteroatoms independently selected from N, O, or S~~ 3-piperidinyl [[and]] wherein said $C_{1-6}alkyl$ or 3-piperidinyl ~~heterocyclic ring~~ may have a $C_{1-6}alkyl$ substituent thereon; or

R^1 and R^2 may together form a ~~substituted 5 or 6 membered heterocyclic ring containing one or more heteroatoms independently selected from N, O, or S~~ 1-pyrrolidinyl, 1-piperazinyl or 4-morpholinyl moiety [[and]] wherein said 1-pyrrolidinyl, 1-piperazinyl or 4-morpholinyl moiety ~~heterocyclic ring~~ may have a $C_{1-6}alkyl$ substituent thereon;

R^3 and R^4 [[is]] are independently selected from halo, nitro, trifluoromethyl, $C_{0-6}alkylCN$, $C_{0-6}alkylOR^6$, $C_{0-6}alkylCONR^6R^7$, $C_{0-6}alkylNR^6(CO)R^7$, $C_{0-6}alkylCOR^6$, $C_{0-6}alkyl(SO_2)NR^6R^7$;

m is 0 or 1;

n is 0 or 1;

R^5 is hydrogen;

R^6 and R^7 are independently selected from hydrogen and $C_{1-6}alkyl$; or

R^6 and R^7 may together form a ~~substituted 5 or 6 membered heterocyclic ring containing one or more heteroatoms independently selected from N, O, or S one or more heteroatoms independently selected from N, O or S~~ 1-pyrrolidinyl moiety [[and]] wherein said 1-pyrrolidinyl ~~heterocyclic ring~~ may have a C_{1-6}alkyl substituent thereon;

as a free base or a pharmaceutically acceptable salt thereof.